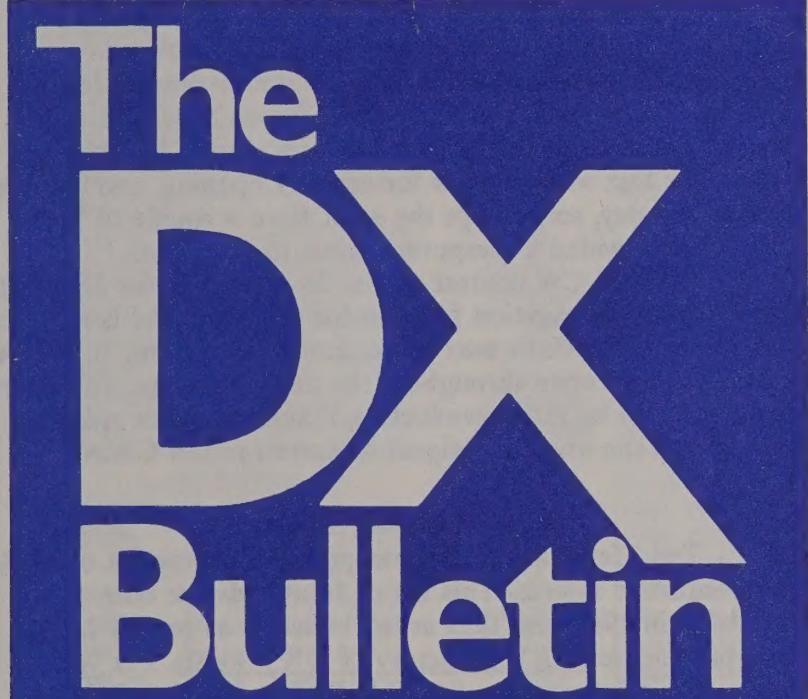


DXpedition News

Vietnam - 3W 3W8DX and 3W8CW got their beam and amplifier through Customs, and had a much-improved signal during CQWW SSB. [Can you believe a 3W multiplier in CQWW!] West coast stations continue to find the stations easy to work, while east coast DXers are having more trouble. If the bands continue to hold out, everyone should get a good opportunity to work these stations in the next month. They've been logged on their advertised frequencies of 35 kHz up on CW, and 28535, 21235, 14235, and 3795 kHz. QSL addresses are in Issue 458.

Cyprus - 5B Lloyd and Iris Colvin are active as **W6KG/5B4** until Nov. 19. Then they move on to the Sovereign Bases on Cyprus to operate for about a month as **ZC4ZR**, including CQWW CW. Iris is often in the DX nets, looking for new countries. QSL Yasme, P.O.Box 2025, Castro Valley CA 94546.

Edited by Chod Harris **VP2ML**



Oblast News UZ9OWM/UJ7K is very active from Oblast 192, through Nov. 10. Watch 7214, 3815, 3790, and 20 kHz up on CW. QSL to UA9OBA, P.O.Box 1, 630092 Novosibirsk USSR. Oblast 192 is a new Oblast formed by the combination of old UJ8X (183) and UJ8K (182), both of which are now deleted. The new Oblast name is Khatlon. The very active station UJ8XDH was still using that call on Oct. 24.

Several Oblasts have been absorbed into neighboring regions, and are now deleted: Oblast 176 UL7Y is absorbed into UL7L 026; Oblast 179 UL7A is now part of Oblast 020 UL7O; Oblast 177 UM8P is now part of Oblast 033 UM8Q; and Oblast 184 was absorbed into Oblast 036 UM8M. These changes were effective October 23, according to UA9CBO.

November 4, 1988

Issue 461

Pacific Tours OH2BAZ's planned operation from Wallis FW0 was cancelled, due to transportation problems. Vili stayed in Fiji as 3D2VV. There was lots of confusion about the 3D2VV operation, as many DXers thought this might be a second call of the Rotuma 3D2XX operation, which wraps up Nov. 5. Both were operating 5 kHz up on CW, contest style. Vili and Peter OH1RY are scheduled to operate from Niue ZK2 Nov. 5-11, as **ZK2RY** and **ZK2AA**. Peter is often on 10M SSB at 23-0100Z. Mats SM7PKK, who also operates 5 kHz up on CW, was due on from Niue Oct. 25, but has not been heard since he left American Samoa on Oct. 23. His next scheduled stop is Tonga A3, Nov. 8-24. Mats likes 14005 kHz at 0330-0430Z.

Reserve Your Island

■ N2IC will operate **KP2A** in the ARRL SSB Sweepstakes Nov. 19-20. K4TEA will put **KP2A** on in the CQ 160 meter contest next year. QSL all KP2A operation to N6CW.

Shortly Noted

■ Omani amateurs will add /ND to their A4X callsigns Nov. 14-20, in honor of Omani National Day Nov. 14. Club station **A4XND** will also be on. They'll offering a certificate for working 5 ND stations: GCR with 10 IRCs to Awards Manager, P.O.Box 981, Muscat, Oman. **A4XGY** meets his QSL manager K2RU at 1200Z on 28450 kHz and at 1600Z on 21345 kHz. DX courtesy says you should let them finish their QSL business *before* you call!

■ Gene Shcumat **UA9AB** runs a Russian Asia DX net Sunday 0200-0430Z on 14161 kHz, with UHs, UIs, UJs, and UMs. He'll help getting cards from these stations, too. QSL direct with IRCs to P.O.Box 17, Troitsk 457100 USSR.

■ **RA0AD/JT5** will be active on the low bands for the next two years. (Tnx DX-NL).

■ **VP8BTY** is on 21367 kHz at 1900Z from Halley Base in Antarctica. Weekends try 21380 kHz at 1700Z. QSL G3KEC.

■ **FT5ZB** leaves Amsterdam Is. this month, after a year of intense activity. His replacement is **FT5ZE**.

■ In additional to Graham **VK0GC**, new Macquarie Is. operators are **VK0IK** and **VK0DS**, starting next month.

■ Ramiz **ZA88RA** was back on the air Oct. 23, on 21050 kHz at 1715Z, 15-18 wpm. He gave his locations as 60XNR1 United Nations, Tirana, and said to QSL to I0NKN. Slim?

■ **W200LA** from Washington State is active Nov. 5-12, 25 kHz up from the General end of the bands. QSL KE7PB.

■ **TV6STR** on the weekends is a special event station honoring the 2000th anniversary of Strasbourg, France. QSL to F6GID.

■ Regulars are (callsign, frequency or band, UTC): **KX6DC** 1824-33, 1030-1200Z, and 3508 1050-1130Z; **4S7CF** 14003-6 0120Z; **4S7WP** 20M CW 00-0100Z; **RH8AO** 14025 03-0400Z; **UJ8XDH** 20M CW 0300Z; **UH9AHA** 20M SSB 03 or 1600Z; **7X4AN** 15M CW 2000Z+; **9M2RU** 15M CW 2345-0130Z; **9X5AA** 10M CW 2030Z; **BV2DA** 10M CW 0000Z; **CE0FFD** 10M CW 21-2200Z; **9J2AL** 28535-40 19-2100Z; **9M2HB** 28533 0200Z; **A35EM** 28525-35 00-0100Z; **BV2A** 28550-55 2345-0100Z; **BY9GA** 28535 00-0100Z; **CN2AQ** 28525-35 18-2000Z, and **FH8CB** 28543 2000Z.

Propagation

Forecast and Historical Data

Day	Forecast	27 Days Before	55 Days Before
<u>November</u>			
4	High Normal	10/08 174 06/13 3	9/10 114 08/17 2
5	Low Normal	10/09 176 14/22 2	9/11 120 33/65 4
6	Disturbed	10/10 179 41/103 5	9/12 125 19/30 2
7	Low Normal	10/11 170 17/27 1	9/13 122 14/24 1
8	High Normal	10/12 149 09/16 3	9/14 129 12/19 2
9	High Normal	10/13 159 08/15 0	9/15 125 13/19 2
10	Above Normal	10/14 151 04/11 1	9/16 127 09/13 2
11	High/Above	10/15 150 04/12 2	9/17 133 18/34 2
12	High Normal	10/16 155 06/14 3	9/18 139 24/51 3
13	High Normal	10/17 178 11/19 3	9/19 138 18/43 3
14	Below Normal	10/18 162 25/34 2	9/20 149 09/18 2

Propagation Watch

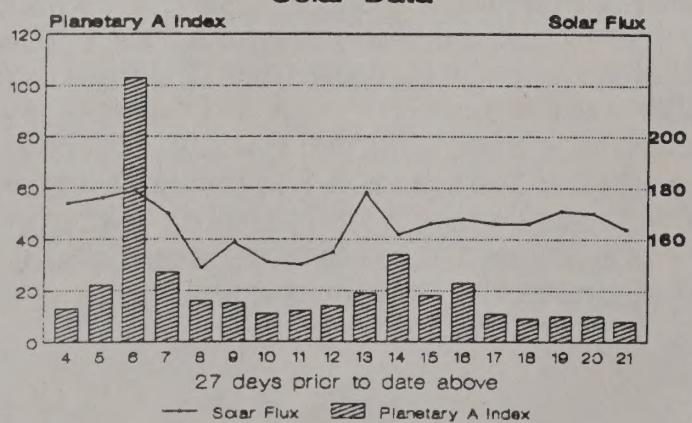
The bands continue to be kind to DXers. Solar flux has hovered in the 150-180 range for the past three weeks, more than enough to keep 10 meters open all day. And geomagnetic activity has remained very low, keeping the maximum usable frequency (MUF) high. The quiet geomagnetic field also means good long-haul propagation, and consistent long-path openings. We expect these good conditions to continue for much of November.

The part of the sun that produced the major storm on October 10 is swinging back to face Earth, so we may see a jump in geomagnetic activity which can depress MUFs, reduce signal strengths, and increase absorption on the low bands, especially around Nov. 6. Otherwise, we look forward to good to excellent conditions for the next few weeks.

Look for long path openings to the west at local sunrise on 20, 30, and 40 meters. Soon after sunrise, 10 and 15 meters open up to the northeast. At times in the early morning, 10, 12, 15, and 20 meters are all open in that direction. The higher bands swing to the south and then west as the day progresses, although increased absorption around midday degrades 20-meter signals. By local sunset, the higher bands are wide open to the northwest.

10 and 12 meters close down a few hours after sunset, and then 15 meters, as late as 3-4 hours after sunset, depending on how high your antenna is. (The higher the antenna, the longer the band opening.) 20 meters comes alive again in early evening, and stays open on the polar path until very late at night. 40 meters is good to the east at local sunset, and again late at night. Try 40 as early as a hour before sunset; it's often open. If the geomagnetic field has been quiet for several days in a row, check 80 and 160 meters, especially after local midnight. Conditions will only deteriorate as winter approaches. Enjoy them now.

Solar Data



CQWW SSB Propagation

We predicted good radio propagation for CQWW SSB Oct. 29-30, and we weren't disappointed. I don't know how *CQ Magazine* manages to schedule good band conditions for the last weekend in October, but their luck held again this year.

The solar flux was not as high as expected, with values of 156 on Saturday, increasing to 167 on Sunday. However, that is more than adequate to keep 10 meters wide open from sunrise to well after local sunset.

The geomagnetic field stayed very quiet for most of the weekend. The Boulder A index was 3 on both days, and the planetary A index stayed in the 9-10 range. (The planetary A index is a combination of readings from several stations, including some at high latitudes, and more closely predicts long-haul propagation.) The K index was also low. In fact, the Boulder K index was zero for much of Sunday.

A minor solar flare around 0500Z on Sunday disturbed the bands to a minor extent, primarily on the sunlit side of the earth. Later Sunday, some patchy fading degraded the high-latitude paths over the poles, and increased absorption on the lower frequencies during daylight. However, MUFs were high throughout the weekend.

As a bonus to VHF DXers, 6 meters opened in the middle of the contest, around 01-0300Z on Sunday. Lots of Australian stations filled the band, with a solid F2 opening. The solar flux was very low for such an opening, and it came late in the day, so perhaps the solar flare a couple of hours later had provided a temporary boost to the bands.

CQWW CW contest comes 28 days after the SSB test, so the early propagation forecast for that weekend is more of the same. The MUFs may be seasonally lower, but 10 meters should still be open throughout the daylight hours. The lower bands should be more productive, thanks to lower noise levels, and the improved signal-to-noise ratio of CW.

Award Update Available

Ted Melinosky K1BV has prepared a free list of 1988, time-sensitive awards. This list of 16 awards are only available in 1988, and thus aren't included as part of his comprehensive *K1BV Directory of DX Awards*. For your copy of this list, send an SASE to Ted at 525 Foster Street, Suite 1001, South Windsor CT 06074. Ted says the 1989 edition of his awards directory will list over 1000 awards!

Hams in Space

US efforts to get another amateur radio operator in space have been delayed until March, 1990, at the earliest. Ron Parise WA4SIR is the payload specialist on the ASTRO-1 space shuttle mission, which has been severely delayed. Even with a licensed amateur on board, there is no assurance that he'll have permission to operate. A team from the ARRL, AMSAT, and NASA is discussing possible plans. Amateur radio was bumped from the list of mission activities on the new NASA list, and the team will try to re-instate the use of a ham rig.

Meanwhile the Soviets are going ahead with plans to operate U0MIR from their Mir (Peace) space station, using a 2-meter FM rig running 2 watts into a 1/4 wave whip. They plan to upgrade their station to a 10-watt rig in 1989, and use the call U0MIR. The operator is not yet a licensed amateur, and supposedly will take his license test in the space station. (Thanks *Westlink Report*.)

Bandpass
Reports Wanted
Ask for forms.

-----RTTY-----

A22BW 28093 1850 23 CA
 FR5ZD P 14107 0300 19 OH
 OK2BRP 28087 1620 23 CA
 RF8F/ UA3TT
 UW9CY 14080 0345 22 CA
 XE3ABC 14091 0210 22 OH
 ZK1CT 14083 0450 24 CA

-----160 Meters-----

KP2A 1834 0350 25 WA
 KX6DC 1833 1030 24 MI

-----80 Meters-----

FT5ZB 3507 1321 22 AZ
 KX6DC 3508 1100 27 MI
 UAOFM 3506 1108 19 NY
 UZ1PWA 3503 2302 26 PA
 V85DA 3507 1439 19 WA

-----75 Meters-----

3D2RY 3788 1438 23 CA

-----40 Meters-----

6W7OG 7077 0624 16 WA
 9M2AX * 7004 2259 23 FL
 9Q5DX 7006 2256 25 FL
 A22BW * 7002 1450 23 AZ
 HB0HTB 7006 0248 24 FL

KH3/ WY5L
 KH8/ SM7PKK
 OX3SG 7075 0700 27 OR

PZ1DV 7004 0045 22 FL

TU4CO 7004 0005 29 FL

UD6DC 7004 1409 21 OR

UG6GAW 7008 0405 27 OR

VK9NS 7000 1110 27 FL

VU2PCD * 7001 1419 21 AZ

YN3CC 7001 0655 27 FL

ZS6QU 7003 0403 23 CA

-----30 Meters-----

UR2RND 10108 0511 22 OH
 XE1OH 10101 2202 23 CT

-----20 Meter CW-----

1Z9A 14043 1315 19 IN
 3B9FR * 14022 1126 17 MA
 3W8CW 14034 1859 27 CA
 3W8CW 14035 1546 31 CA
 4K0D 14011 0109 22 KY
 4S7CF 14003 0120 23 FL

4S7TP 14002 0104 25 FL

4S7VJR 14015 0125 20 OR

4S7WN 14019 1111 22 MI

4S7WP 14029 0138 26 FL

5VU386 14026 2245 25 FL

9L1DX 14011 0420 25 OR

A4XJS 14016 0330 23 OR

A4XJZ 14016 0330 23 MA

AP2HA 14030 0130 20 MI

FK8FN 14003 1212 20 PA

FR4FA/J 14038 0401 31 CA

FT2XE 14055 1340 19 IN

FT2XE 14055 0110 22 ME

HS0B 14057 1735 19 NH

HS0B 14027 1209 24 WI

JT1BV 14007 1454 25 OR
 JX1UG 14028 1755 18 OR
 KH8/ SM7PKK
 RH8AA 14025 0415 21 OR
 RH8AO 14025 0315 22 OR
 RV0YF 14026 1258 24 WI
 RV0YF 14009 0106 25 FL
 Zone 23
 UA1OIL 14014 1440 24 WI
 Franz Josef Land
 UA6IA 14016 0320 25 OR
 UH8AAD 14024 0254 23 PA
 UH8AAG 14027 0140 22 ME
 UI8OAE 14024 0036 29 FL
 UJ7K/ 14018 1550 27 OR
 UZ9OWM
 UJ8XDH 14008 0306 24 VA
 UL7IAL 14018 0421 23 FL
 UL7PO 14022 0254 24 FL
 UL7VBP 14022 0144 23 FL
 UZ0DWD 14013 0444 21 WI
 UZ0YWA 14013 1324 26 OR
 YK1AO 14030 0441 24 CA

UI7RER 21024 0255 25 OR
 UJ8XDH 21007 1528 24 WI
 UL7GM 21015 0457 17 OR
 UL7RER 21010 0406 25 OR
 VQ9QM 21033 1923 23 LA
 ZD8DP 21016 2153 27 FL
 ZS3BI 21005 2040 17 OR
 -----15 Meter SSB-----
 3A2AG 21288 1715 25 VA
 3B9FR 21335 1829 22 FL
 3W8DX 21235 1248 23 MD
 4U1ITU 21294 1415 18 NY
 7P8DP 21266 2006 25 MD
 9G1PP 21345 1935 23 VA
 9J2BO 21335 1913 21 AL
 9M2RU 21302 0230 24 MO
 9M2ZZ 21240 0330 23 CA
 A92BE 21205 0435 25 NM
 BV2FA 21238 0207 24 WI
 BY9GA 21306 0228 24 WI
 JT1BG 21288 0047 23 NM
 SU1ER 21345 1927 23 NV
 TF5BW 21270 2000 25 NY
 TL8HW 21245 2045 21 KY
 TL8JL 21303 1945 15 MA
 TU2PA 21294 2150 14 NY
 TZ6AS 21303 2212 21 MA
 UZ0DWD 21211 0308 25 OR
 VK9YG 21296 0107 21 CA
 ZS3TP 21290 2100 10 NY

-----20 Meter SSB-----
 3B9FR 14238 0306 22 MI
 3D2RY 14161 0607 22 AZ
 4K0D 14247 0320 22 MN
 5V7TM 14180 2326 18 NY
 AP5HQ 14233 0340 24 MO
 BV/ JA2EZD
 BY4AA 14188 1230 22 NH
 EP2ASZ 14159 2357 21 AL
 FT5ZB 14238 0305 22 MI
 J28DN 14207 0015 19 MA
 JW5E 14242 2220 22 OH
 OX3SG 14192 0633 23 VA
 RZ1OWA 14219 0400 23 MA
 Franz Josef Land
 SU1BA 14192 0104 22 MD
 UH9AWA 14213 0315 24 OR
 UH9AWA 14237 1647 24 CA
 UH9HWB 14226 1430 21 CA
 UI8CD 14190 0230 23 WY
 UI8DAF 14160 0353 24 OR
 UI8ZAA 14251 0307 22 AL
 UJ8SAD 14196 0225 23 FL
 UL7NW 14199 0159 23 NH
 UM9TWA 14221 0445 27 OR
 VP8BRR 14222 0914 18 NV
 VR6ID 14242 0312 18 ON
 YI1BGD 14192 0039 21 CT
 YI1BGD 14192 0400 21 CT
 ZD7BJ 14222 2115 23 WA

-----12 Meters-----
 4Z4UB 24970 1750 22 CT
 6W7OG 24959 1225 16 NS
 9M2RU 24302 0245 24 OR
 C31LPP 24899 1537 23 PA
 EA6ZY 24949 1626 22 CT
 FH8CB 24950 2057 23 CT
 FR5EL 24940 1802 22 VA
 HB0HTA 24980 1520 23 PA
 P29ZL 24931 0014 16 NS
 TV6STR 24898 1306 23 VA
 -----10 Meter CW-----
 3D2VV 28009 2117 23 FL
 5UV386 28026 1624 29 FL
 7X2ARA 28044 1300 21 GA
 9J2AL 28041 1918 20 NC
 9M2AX 28032 2359 16 MN
 9Q5DX 28012 2015 20 OR
 9X5AA 28012 2031 20 NH
 BV2DA 28003 2234 23 MI
 BV2DQ 28006 2241 26 ID
 CE0FFD 28011 2124 22 MA
 CN8FC 28029 1343 23 FL
 EA9EU 28021 1846 16 MA
 HL1WP 28002 2326 23 FL
 HZ1HZ 28004 1233 21 NC
 OY6FRA 28005 1403 16 FL
 PY0FF 28012 1258 23 OH
 PZ0AA 28025 1752 18 NH
 RI8OA 28024 1302 23 FL
 T77C 28009 1715 23 FL
 TA2AO 28028 1518 20 NC
 TF3LB 28051 2100 22 OR
 TF3SZ 28003 1949 23 PA
 TK0A 28034 1322 23 FL
 TR8CC 28057 2152 15 GA
 TU0A 28009 1715 23 FL
 TU4CO 28009 2335 16 CA
 UD6DG 28015 1702 27 FL
 UG6GRA 28023 1233 29 FL
 UJ8XDH 28010 1240 23 FL
 UL7GDX 28019 1310 23 CT
 VP2MT 28025 2040 27 FL
 VS6DO * 28018 1230 17 MI
 XE2CM 28024 0016 17 GA
 YI1BGD 28048 1410 22 IA
 ZC4NC 28011 1155 21 MA

-----6 Meters-----
 HC1BI 50115 1602 10 NS
 HC2FG 50115 1602 10 NS
 HC5K 50105 1607 10 NS
 LU7DZ 50097 2117 19 FL
 LU8AHW 50110 2154 12 FL
 TI2KD 50108 1603 10 NS
 TI2HL 50115 1622 10 NS
 VP8PTG 50110 2149 17 FL
 -----Novice Band-----
 CN8FC 21120 1354 23 FL
 CU2/ 21120 1353 23 FL
 WA1DP
 DL2SDF 21134 1408 23 FL
 FE6BDM 21111 1402 23 FL
 G0FIP 21138 1358 23 FL
 IK1CIZ 28125 1413 23 FL
 OH3NHF 21131 1404 23 FL
 ON7XO 21121 1404 23 FL
 OZ1EUO 21119 1352 23 FL
 PA0LVB 28119 1412 23 FL
 SM7OSW 28109 1410 23 FL
 UA9CTQ 21107 1349 23 FL
 UB5IJY 21118 1352 23 FL
 YU7BDO 21124 1354 23 FL

Key to Bandpass: Callsign, frequency in kHz, UTC, day of month, state of reporting station. * = long path; P = packet. All 'portable' calls are listed with country of operation first, regardless of format used on the air.

1 498 YOUR SUBSCRIPTION ENDS 89/10

TEMPLE HILLS MD 20748

5801 HUNTLAND ROAD

ALFRED A LAUN K3ZD

POSTMASTER: Send address changes to **The DX Bulletin**, P.O. Box 50, Fullerton, CA 95439.
Second-class postage paid at Santa Rosa, CA.
One-year subscription rates are: \$29 Second Class
Mail, \$38 First Class Mail, US\$50 Foreign Airmail.
(ISSN 0279-8077) is published fifty times per year at
P.O. Box 50, Fullerton, CA 95439 (707) 523-1001.
Copyright The DX Bulletin. The DX Bulletin
is published fifty times per year at
P.O. Box 50, Fullerton, CA 95439 (707) 523-1001.
ISSN 0279-8077

FIRST CLASS MAIL

First Class Postage Paid
U.S. Postage Paid
Santa Rosa, CA
Permit No. 550

U.S.A.
Fullerton, CA 95439
P.O. Box 50



CALENDAR

Issue 461 - November 4, 1988

(Changes and hot info in **boldface**.)

Algeria - 7X	7X4AN 21010 kHz 2200Z	I460	Sovereign Bases ZC4	ZC4ZR Yasme Nov 19-Dec 16	I461
Antarctica	VP8BTY 21367 1900Z	I461	Sri Lanka - 4S	4S7CF 14003-6 0120Z	I461
Antigua - V2	V21LJ Nov. 17-Dec. 3	I458		4S7WP 20M CW 00-010Z	I461
Bahrain - A9	A92BE 10 M SSB 1400Z	I459	Syria - YK	YK1AO 14030-40 kHz 0245Z	I458
Belau - KC6 (w)	KC6s NX MZ SW Nov. 4-7	I459	Tanzania - 5H	two years by K3TW	I460
Bora Bora - FO	FO0SSJ Oct. 30-Nov. 30	I455	Tonga - A3	SM7PKK Nov. 8-24	I453
Canary Is. - EA8	EA8AGD CQWW CW	I452	Trinidad - 9Y	9Y4TT CQWW CW	I452
Central African	TL8TG on CW by 9Q5NW soon	I460	Trindade - PY0T	by PY5ZZ Nov. low bands	I457
Chagos - VQ9	VQ9QM 14028 2130-0100Z	I459	Turkoman - UH	RH8AO 14025 03-0400Z	I461
Congo - TN	21029 1400Z	I459		UA9AHA 20M SSB 03, 1600Z	I461
Cyprus - 5B	TN4NW Nov-Dec. CW, too	I456	United Nations	4U1UN 2200Z Friday CW	I457
E. Carolines KC6	Yasme DXpedition W6KG/5B4	I460		4U1ITU Nov 23-30 by WA2TMPI	I460
E. Malaysia - 9M	KC6TO CQWW CW	I452	US Virgin Islands	KP2A in ARRL SS, CQ 160M	I461
Franz Josef Land	9M8PV 21240-65 0200Z	I456	Vanuatu - YJ	YJ8AA 14213 kHz 1200Z	I453
Galapagos - HC8	9M8VD OH2XD CQWW SSB	I459	Vietnam - 3W	3W8DX, CW Oct. 21-Nov.	I459
Guinea-Bissau - J5	UA1OIL 14165 kHz 12-1300Z	I460		35 kHz up on CW, 28535, 21235	
Honduras - HR	by HC1MD Nov. 1-4	I455		14235, and 3795 kHz	I461
Iraq - YI	J52US 14210-15 0100Z	I459	West Malaysia - 9M2	9M2RU 21026 0100Z	I460
Ivory Coast - TU	JA0UQY/HR3 10-40M	I457	Zaire - 9Q	9Q5DX 28010 18-2200Z	I460
Jan Mayen - JX	YI1BGD 15 meter SSB 1300Z	I458		DX Activities and Contests	
Juan de Nova - FR/J	TU4CO 28010 2130Z	I460	<u>Date</u>	<u>Event or Activity</u>	<u>Info</u>
Kerquelen - FT-X	JX1UG to March	I457	Nov. 5	NEDXCC Diner	K1ST
Luxembourg - LX	FR4FA/J for one month	I459	Nov. 5-7	ARRL SS CW	QST
Macquarie - VK0	FT2XE 14055 kHz 1100Z	I449	Nov. 11-13	Japan International	CQ
Marshall Is. - KX6	LX8A CQWW CW by Bavarians	I460	Nov. 12-13	European RTTY Contest	CQ
Mayotte - FH	VK0GC, VK0IC, VK0DS soon	I461	Nov. 19-21	ARRL SS SSB	QST
Montserrat - VP2M	KX6DC 1824-33 1030-12Z	I461	Nov. 26-27	CQWW CW Contest	CQ
Mozambique - C9	3508 kHz 1050-1130Z			Contributors	
Netherland Antilles	FH8CB 28543 kHz 2000Z	I461		This Issue of <u>The DX Bulletin</u> would not have been	
New Caledonia - FK	VP2MDC CQWW CW M/S	I450		possible without the invaluable assistance of the following:	
Niger - 5U	VP2MW CQWW CW M/S	I450		KH6BZF, SESC, AB8K, K0CVD, K0HB, K0KES, K1MEM,	
Niue - ZK2	C9MKT Nov. 25-27, 21295 16Z	I458		K2EK, K2UFM, K4BAI, K5WGG, K6IR, K7MJD, K7SLI,	
Oman - A4	PJ2X CQWW CW M/S	I458		K8CV, K8RWL, KA4YAE, KA7T, KA9OKH, KA9TSW,	
Revillagigedo - XF	FK8FU 14250 0430Z	I457		KC3M, KC7V, KD7SO, KJ4BK, KJ4VH, KQ3S, KR4M,	
Rodriquez - 3B9	TU4BR/5U7 14047 23Z	I452		KW0A, N0BSH, N1CIX, N1DYI, N1HN, N2GLH, N2HOS,	
Rwanda - 9X	and 21050-65 kHz 2230Z			N2KK, N4MM, N4XR, N6IBP, N7JXN, N8AGU, NS3K,	
Sao Tome - S9	ZK2RY,AA Nov. 5-11	I453		NS6C, NX7K, VE1YX, VE3NN, W1BFT, W1CYB, W1HH,	
Saudi Arabia - HZ	SM7PKK Oct. 25-Nov 7	I453		W1NG, W1UN, W1WAI, W3MFV, W4VQ, W6AUG, W6BJI,	
So. Georgia - VP8	/ND Nov. 14-20, Awards	I461		W6JOX, W6MUS, W6RFF, W7AWA, W7AYY, W7CRT,	
	XF4C Dec. 15-20 SSB	I455		W8MEP, W8UVZ, W9DH, W9RXJ, WA6CTA, WA7WOC,	
	3B9FR 14020-25 0250Z	I456		WA9AQE, WB4OSN, WB5MTV, WB8SFF, WB8ZRL, WJ7R,	
	9X5AA 10M CW 2030Z	I461		WK7Z, WS7W, WW4Q, K8NEU, WB1EAZ, N9GMM, W7YS,	
	S92LB 10M SSB 20-2100Z	I460		KD0ZR, KV4AM, W6UQF, WA1NPZ, WB6GFJ, W5SUV,	
	HZ1AB, HZ 10M CW 14-1500Z	I459		KF7E, W4FRU, K0PP, KP2A, UA9AB, W1AW, W1QV,	
	VP8s BRR, BUB SSB nets	I457		KE7PB, <u>DX-NL</u> , and the NCDXC. Thanks for your help! -ed.	